10

15

20

25

30

WHAT IS CLAIMED IS:

- A thin film transistor array panel comprising:
- a substrate including a plurality of pixel areas;
- a semiconductor layer formed on the substrate and including a plurality of pairs of first and second semiconductor portions in respective pixel areas;
 - a first insulating layer formed on the semiconductor layer;
 - a gate wire formed on the first insulating layer;
 - a second insulating layer formed on the gate wire;
 - a data wire formed on the second insulating layer;
 - a third insulating layer formed on the data wire;
 - a pixel electrode formed on the third insulating layer and connected to the data wire,

wherein width and length of at least one of the first and the second semiconductor portions vary between at least two pixel areas.

- 2. The thin film transistor array panel of claim 1, further comprising:
 - a plurality of partitions for defining the pixel areas; and
- a plurality of organic light emission members formed on the pixel electrodes.
- 3. The thin film transistor array panel of claim 1, wherein the semiconductor layer further includes a plurality of storage electrode portions,

the gate wire includes a plurality of first and second gate electrodes and storage electrodes overlapping the first and the second semiconductor portions and the storage electrode portions, respectively,

each of the first and the second semiconductor portions has a channel region, a source region, and a drain region, and

the data wire includes a plurality of first and second data lines, a plurality of first source electrodes connected to the first data lines and to the source regions of the first semiconductor portions, a plurality of first drain electrodes connected to the drain regions of the first semiconductor portions and to the second gate electrodes, a plurality of second source electrodes connected to the second data lines and to the source regions of the second semiconductor

5

15.

portions, and a plurality of second drain electrodes connected to the drain regions of the second semiconductor portions and to the pixel electrodes.

- 4. A thin film transistor array panel comprising:
- a plurality of first thin film transistors;
- a plurality of second thin film transistors connected to the first thin film thin film transistors and including channel regions having at least two widths and lengths; and
- a plurality of pixel electrodes connected to the second thin film transistors.
- 10 5. The thin film transistor array panel of claim 4, wherein the channel regions comprise polysilicon.
 - 6. The thin film transistor array panel of claim 4, wherein each of the first and the second thin film transistors has a gate, a source, and a drain, and the gates of the second thin film transistors are connected to the drains of the first thin film transistors.